

### AMENDMENTS TO THE SPECIFICATION

Please amend paragraph [0031] as follows:

[0031] FIG. 1 shows a cross section through an end-to-end anastomosis of two hollow organs 1, 2, for example two arteries. Over the end of the hollow organ 1 a sleeve 3 has been pushed, and the end of the hollow organ 1 has been folded back over this sleeve 3. Then the end of the hollow organ 2 to be connected thereto is pushed over the inverted end of the first hollow organ 1, which now encloses the inner sleeve 3, and finally the outer sleeve 4 is placed over the inner sleeve 3. So that the sleeves 3, 4 can be removed after anastomosis is complete, each is designed to be separable. In accordance with the invention the inner sleeve 3 and the outer sleeve 4 both incorporate electrically conductive material, which preferably takes the form of corresponding contact surfaces 5, 6 in the sleeves 3, 4. It is likewise possible for the sleeves 3, 4 as a whole to be made of electrically conductive material. The contact surfaces 5, 6 are preferably disposed circumferentially around the sleeves 3, 4, so that after coagulation has been completed a continuous, secure connection between the hollow organs 1 and 2 will be achieved. In the example provided, the contact surfaces 5, 6 do not extend along an entire length of the inner and outer sleeves, respectively. The contact surfaces 5, 6 are connected by way of corresponding leads 7, 8 to an external current or voltage source 9, which applies an appropriate current or voltage to the contact surfaces 5, 6 for electrocoagulation of the hollow organs 1, 2 that are to be connected. To control the applied current or voltage, a control means 10 can be disposed between the current or voltage source 9 and the contact surfaces 5, 6 on the sleeves 3, 4, which can also include a time-switch 11 to determine the duration of the current or voltage pulses, or can be connected to such a time-switch 11. For measurement of the impedance of the tissue between the contact surfaces 5, 6 there can be connected to the leads 7, 8 a corresponding impedance-measuring apparatus 12, which in turn can be connected to the current or voltage source 9 or to the control device 10 to control the current or the voltage during the electrocoagulation. To monitor the temperature during electrocoagulation, in the inner sleeve 3 and/or the outer sleeve 4 can be disposed a temperature sensor 13, which is preferably connected directly to the current or voltage source 9 or to the control means 10 for regulating the connection process. With the device in accordance with the invention it is possible to

create an optimal connection by employing the sleeves 3, 4 (which are known per se) and using electrical energy to fuse the tissues of the hollow organs 1, 2. After the anastomosis has been completed the sleeves 3, 4 are removed, so that no foreign bodies remain and a seamless connection between the hollow organs 1, 2 results.